



AGRILUS PSEUDOCYANEUS KIESENWETTER, 1857 A NEW COUNTRY RECORD FROM EASTERN SLOVAKIA (COLEOPTERA: BUPRESTIDAE)

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Abstract: The jewel beetle *Agrilus pseudocyaneus* (Coleoptera: Buprestidae) is for the first time recorded from eastern Slovakia.

Key words: Agrilinae, new country record, Slovakia

INTRODUCTION

Agrilus pseudocyaneus is the rarest species among his congeners in Europe. Since its discovery in 1857, the species is known only from a few scattered findings some of them some hundred years ago (Austria, Finland and Switzerland). The finding of this species in Slovakia was predicted by JENDEK (2001) and it represents the westernmost recent record of the species in Europe.

Brief taxonomic history. *Agrilus pseudocyaneus* was described by KIESENWETTER (1857) from Austria without precise data. Forty years after (1897), ABEILLE DE PERRIN described similar but much more common *A. delphinensis*. The unavailability of specimens of *A. pseudocyaneus* in collections rose the question about the concepts of *A. pseudocyaneus* and *A. delphinensis*. The species were considered either conspecific (e.g. BEDEL 1921, OBENBERGER 1936), subspecific (e.g. THÉRY 1942) or a distinct species (THÉRY 1945). Since SCHAEFER (1949), the subspecific concept prevailed and *A. delphinensis* was considered a subspecies of *A. pseudocyaneus*. This caused that many distributional records published under the name *A. pseudocyaneus* actually refer to *A. delphinensis*. In 1993, a new species *A. bialowiezaensis* Gutowski, 1993 was described from the Bialowieza Primeval Forest in Poland. In 1995, two type specimens of *A. pseudocyaneus* were located in the Museum für Naturkunde der Humboldt-

Universität exactly as mentioned in the original description of Kiesenwetter (JENDEK 1995). The type study revealed that *A. pseudocyaneus* and *A. delphinensis* are very close but distinct species (see differential diagnosis) and *A. bialowiezaensis* is conspecific with *A. pseudocyaneus*. Recent reliable records of *A. pseudocyaneus* are reported from Poland (GUTOWSKI & LUGOWOJ 2000; GUTOWSKI 2001; GUTOWSKI 2004; GUTOWSKI et al. 2019; MARCZAK et al. 2020), Belarus (TSINKEVICH et al. 2005; TSINKEVICH 2019) and Ukraine (PROKHOROV 2010; PROKHOROV & VASILYEVA 2015; JENDEK 2016).

Taxonomic position. *Agrilus pseudocyaneus* belongs to the betuleti species-group as defined by JENDEK & GREBENNIKOV (2011). The most related species is *Agrilus voriseki* Jendek, 1995 which represents his East Asian vicariant.

Differential diagnosis. In Europe, *A. pseudocyaneus* (Fig. 1) can be mixed with other bluish *Agrilus* like *A. viridis* (Linné, 1758); *A. suvorovi* Obenberger, 1935; *A. sulcicollis* Lacordaire, 1835; *A. cyanescens* Ratzeburg, 1837 and *A. delphinensis*. From the very similar *A. delphinensis* it differs primarily by markedly larger size 5.6-7.8 mm and by large and deeply emarginated pronotal lobe (*A. delphinensis* 4-5.3 mm, pronotal lobe narrow and feebly emarginated). From *A. cyanescens* and *A. sulcicollis* it differs mainly by the shape of sternal groove on the apex of last ventrite, which is arcuate and not sinuate as that at *A. cyanescens* and *A. sulcicollis*. From *A. viridis* and *A. suvorovi* it differs by elytral apices widely arcuate (not narrowly prolonged) and by lateral pronotal impressions much wider and deeper with very smooth surface.

Material examined. East Slovakia:

- 1) 1 ♀, 26 June 2023, Stakčín municipality territory, 49.105511, 22.379183, alt. 670 m, faunal grid 6800, scrubby slope; visual collecting on leaves of *Salix* together with *Agrilus integerrimus* (Ratzeburg, 1837) and *A. viridis*. Collector Ivan Smatana. Specimen was determined and is preserved in the collection of Eduard Jendek. Fig. 2.

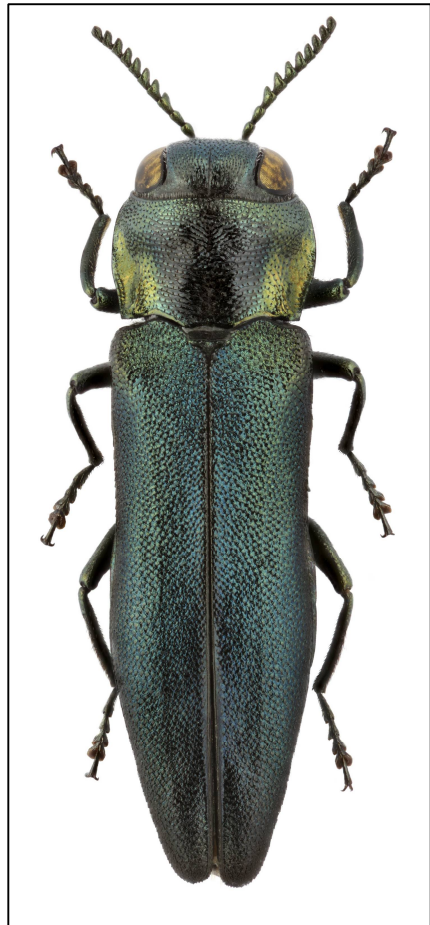


Fig. 1. Habitus of *Agrilus pseudocyaneus* Kiesenwetter, 1857. Photo M.E. Smirnov.



Fig. 2. General habitat of the collecting site 1. Stakčín municipality territory.
Photo Stanislav Benedikt.



Fig. 3. General habitat of the collecting site 2. Runina municipality territory.
Photo Richard Szopa.

- 2) 1 ♂, 17 June 2024, Runina municipality territory, 49.0674950, 22.3953792, alt 520 m, faunal grid 6900, sweeping *Populus tremula* with long telescope (8 m) together with *A. suvorovi* Obenberger, 1935, *A. pratensis* (Ratzeburg, 1837) and *A. ater* (Linné, 1767). Sunny day with moderate wind and temperature around 26 °C. Collecting time around 2 p.m. Collector Richard Szopa. Specimen was determined by Richard Szopa and by Eduard Jendek and is preserved in the collection of Richard Szopa. Figs. 3-4.



Fig. 4. Host tree of *Agrilus pseudocyaneus* on the collecting site 2. Runina municipality territory. Photo Richard Szopa.

Distribution. **Asia:** Russia: Kemerovo, Sverdlovsk, Yamalo-Nenets. **Europe:** Austria; Belarus; Finland: Ita-Suomen lääni; Poland: Podlaskie; Romania; Russia: Karachayevo-Cherkesiya, Krasnodar, Leningrad, Moskva, Nizhegorod, North Ossetia, Orenburg, Samara, Vladimir; Slovakia; Switzerland: Graubünden; Ukraine: Kiev.

Biology. Outlined by GUTOWSKI (1993) under the name *A. bialowiezaensis* and by GUTOWSKI (2004). **Host plant.** Reliable records refer to *Populus tremula* as adult host by GUTOWSKI et al (2019) and as larval host by GUTOWSKI (2004). *Salix* as an adult host was recently recorded by MARCZAK et al. (2020). Published host plants records were analyzed by JENDEK & POLÁKOVÁ (2014).

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